

# IMM 460-01: Games II: Implementation—Spring 2022

## Course Syllabus

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**Meeting Time:** Fridays, 1:30-5:20 PM, AIMM 202

**Instructor:** Matthew DiMatteo

**Email:** [dimatte4@tcnj.edu](mailto:dimatte4@tcnj.edu)

**Discord:** Matthew DiMatteo#3880

**Office Hours:** By Appointment

**Best Availability:** Thursdays, after class on Fridays

Please email me or send me a message on Discord if you have any questions or concerns. I'm happy to meet before or after class, and if you'd like to arrange a Zoom meeting during the week, let me know and I'll find a time that works for both of us.

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**Peer Mentor:** Patrick Merkle

**Email:** [merklep1@tcnj.edu](mailto:merklep1@tcnj.edu)

**Discord:** P-Merks#6333

**Best Availability:** Tuesdays and Wednesdays

**A note from Patrick:** Feel free to message me on Discord or send me an email at any time! I am happy to help with any issues you may be having in Unity or just in general with your projects. I have a lot of experience coding in Unity, as well as working in a group environment, so I will do my best to help you guys with any questions you may have during the game development process!

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**Peer Mentor:** Jack Brubaker

**Email:** [brubakj1@tcnj.edu](mailto:brubakj1@tcnj.edu)

**Discord:** JackBru#7875

**Best Availability:** Tuesdays and Wednesdays

**A note from Jack:** I welcome people messaging me on Discord if they need any help during development. I have a lot of experience making and implementing assets, animations, as well as music and sound effects. I have worked in a group before and can help guide healthy teamwork and resolve any issues.

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### Course Description

Games II: Implementation places students on interdisciplinary teams with the goal of developing a complete digital game. Each team member will specialize in a particular

area, such as programming, art, audio, writing, etc. All team members are expected to contribute to the design. Teams will set and adhere to a project schedule, meet in and outside of class each week, playtest regularly, analyze, prioritize, and utilize feedback to iterate on the game, work toward defined milestone goals, and compile comprehensive design documentation in addition to creating a fully functioning digital game. Students will develop interpersonal skills such as communication, cooperation, and conflict resolution, while maintaining accountability for individual deliverables.

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### Recommended Text:

[\*Game Design Workshop: A Playcentric Approach to Creating Innovative Games\*, 2nd Edition, Tracy Fullerton \[ISBN-10: 0240809742 ISBN-13: 978-0240809748\]](#)

[Full text](#) and [individual chapters](#) available as PDFs via [Canvas](#)

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### Electronic Course Resources

1. **Canvas**—Resources such as [class slides](#), [readings](#), and [tutorials](#) will be accessible online through [the Files section in Canvas](#). Assignment instructions can be found in the [Assignments section](#). [Zoom](#) may be used in the event that a class must be switched to a remote format, as well as for 1-on-1 milestone meetings. Any changes to the instruction format or any other announcements will be posted in the [Announcements section](#).
2. **Discord**—Teams will use Discord to communicate outside of class.
3. **Google Sheets**—Teams will [post project links to this sheet](#) and individuals will [sign up for one-on-one milestone meetings using this sheet](#).
4. **Unity**—Students will require a computer that can run the Unity game engine and editor. Visit [Unity's Web site](#) to [download Unity and Unity Hub](#) for Windows, MacOS, or Linux. You can also find helpful [documentation](#) and [tutorials](#) on the Unity site.
5. **Project Hub**—Teams will be required to establish an online presence to serve as a hub for all group-based work, including design documentation and other [artifacts](#). The specific technology used should be agreed upon by all team members at the beginning of the semester. Consider tools such as [GitHub](#), [Google Drive](#), [Squarespace](#), [WordPress](#), or a [wiki platform](#). Feel free to use a combination of these tools, and/or anything not listed here that you prefer, but try not to make it overly complicated. The important thing is that everyone on the team has access to whichever resource(s) you choose to use.

6. [Adobe Creative Cloud](#)—Students currently enrolled in any IMM course will have full access to the Adobe Creative Cloud, and can download any software to personal computers by [logging in](#) with their TCNJ username and password [here](#). *Please note, however, that this access is only guaranteed for the duration students are enrolled in the course—be sure to back up any files saved to Creative Cloud storage prior to the end of the semester).*
  7. [LinkedIn Learning \(Formerly Lynda.com\)](#)—Students enrolled in IMM courses also have access to LinkedIn Learning, a great resource for tutorials on digital media, coding, and other skills. [Sign in with your TCNJ credentials here](#).
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### Course Requirements

1. Students will be expected to arrive to class on time, participate in class discussions and workshops, present, discuss, and defend ideas, and complete assignments by the date due. In the event of absence, students are responsible for catching up on material covered in class and completing any assignments.
2. Students are expected to contribute to their teams according to their roles, contribute to the overall game design, decision making, and management of the project, and contribute to the final design documentation and presentation.
3. Students should expect to spend an average of eight hours per week outside of class time in order to complete assignments. Each team is expected to meet outside of class each week during an agreed upon date and time. Students are strongly encouraged to work consistently throughout the semester. Always take into account the lab hours and possible technical problems when planning out the time you will spend on work.
4. Students are responsible for saving and backing up their work, and are strongly encouraged to utilize multiple backup locations, such as external hard drives, personal computers, and cloud storage services such as Google Drive or Dropbox. Lab machines and network storage drives should never be depended on, and should be treated as temporary, as they are routinely cleaned. Because students are expected to habitually back up their files, the loss of data is not considered an acceptable excuse.
5. Students are expected to abide by TCNJ policy aimed at preventing the spread of COVID-19. As of August 16, 2021, this includes wearing a face covering while indoors, regardless of vaccination status. Because this is a fluid situation, policy and guidelines are subject to change. You can see the latest updates on the [TCNJ Fall 2021 page](#).

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## Course Learning Goals

Students will:

1. Specialize in and contribute to a particular aspect of game development
2. Work as part of an interdisciplinary team
3. Manage tasks and adhere to a project schedule with milestone goals
4. Perform regular playtesting sessions and iterate based on feedback
5. Meet regularly with the instructor to discuss personal and team progress
6. Meet regularly as a team both in and outside of class
7. Build a fully functional digital game
8. Compile comprehensive game design documentation
9. Communicate and advocate for your ideas

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## **Course Schedule** (subject to change; [download a detailed schedule as a PDF](#))

Week 01	Jan. 28	Course Overview, Team Formation
Week 02	Feb. 4	Team Agreements, Conceptualization
Week 03	Feb. 11	Documentation and Prototyping
Week 04	Feb. 18	Milestone #1 Playtest
Week 05	Feb. 25	Milestone #1 Assessment Meetings
Week 06	Mar. 4	Development and Playtesting
Week 07	Mar. 11	Development and Playtesting
<i>No class Mar. 18 (Spring Break)</i>		
Week 08	Mar. 25	Milestone #2 Playtest
Week 09	Apr. 1	Milestone #2 Assessment Meetings
Week 10	Apr. 8	Development and Playtesting
Week 11	Apr. 15	Development and Playtesting
Week 12	Apr. 22	Milestone #3 Playtest
Week 13	Apr. 29	Milestone #3 Assessment Meetings
Week 14	May 6	Milestone #4 Playtest
Finals	May 13	Milestone #4 Assessment Meetings

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## Assignments and Grading

Students' grades for this course will be the product of qualitative [self assessments](#) at four milestones throughout the semester: Weeks 5, 9, and 13, and during the final exam week. At each milestone, students will complete a questionnaire requiring them to evaluate their learning and contributions to their team's project, using documentation of

personal deliverables as a basis for assigning themselves a tentative grade. After completing the questionnaire, students will meet with the instructor to discuss their self assessment and agree on a formal grade for that milestone. Each of the four milestone self assessments will carry equal weight (25%) toward students' final grade for the semester.

Each team will compile several [artifacts](#) over the course of the semester, culminating in the completion of their digital game's final build. While these artifacts themselves will not be graded, students can expect to cite their contributions to these artifacts to support the grade they assign themselves as part of each milestone's self assessment. Artifacts should be posted on the team's [project hub](#) so that all team members have access, and each team will be expected to share links to these artifacts using [this spreadsheet](#).

[Artifacts](#) each team will produce include:

- [Project Hub](#)
  - An online presence where the team can post other artifacts. Consider tools such as [GitHub](#), [Google Drive](#), [Squarespace](#), [WordPress](#), or a [wiki platform](#). Whatever technology you choose should be agreed upon by each member of the team, and everyone should be able to access the project hub.
- [Team Agreement](#)
  - A written agreement stating the team's goals, the roles, responsibilities, and expectations for each team member, a definition of the ownership of the project, and the timeframe this agreement covers. A weekly meeting time and place (outside of class) should also be specified, one that works for each team member.
- [Initial Ideation](#)
  - A description of six initial concepts developed through a preliminary brainstorming session.
- [Concept Document](#)
  - An initial description of the game's goals and requirements. This should be a brief description (approximately one to two paragraphs) quantifying a discrete scope for the game (i.e. number of levels, number of assets), specifying gameplay goals including features and player experience, and any technical goals, such as hardware, software, target platform, and any other consideration such as special inputs or networking.

- [Project Schedule](#)
  - A spreadsheet, calendar, or other timeline representation of the work needed to be done in order to complete the digital game project on time. Milestones, including the final build of the game, should be defined, and concrete tasks should be specified with deliverables assigned to individual team members. Additionally, specific goals for the project as a whole should be defined, such as the date by which particular features or game areas will be implemented. The status of each deliverable (i.e. not started, in progress, finished) should be updated throughout the semester, and the schedule itself may be revised as needed. Any changes should be clearly communicated to each team member.
- [Design Documentation](#)
  - A comprehensive document, Web site, or wiki detailing the game's design. The design document is a living document, meaning the team will be expected to keep it up to date as they work on the game and make changes to its goals and requirements. It should include the high-level game concept and theme, a version history, a detailed explanation of gameplay, rules, features, and any narrative elements, an asset list, and market research, including the target audience, target platform, and similar games that exist. More information on design documentation can be found in [Chapter 14](#) of [Game Design Workshop](#).
- [Digital Game Build](#)
  - Each team's ultimate goal is to create a fully functional digital game. Assets such as code, art, sound, writing, etc. will be produced throughout the course of development in working toward this goal. These assets, or screenshots of workspaces, may be leveraged by students in their self assessments as basis for the tentative grade they assign themselves each milestone. Programmers on each team will be responsible for producing runnable builds at milestones and for playtesting sessions. All team members will be responsible for their individual deliverables as specified in the agreed-upon project schedule.

[Download this PDF for more information on artifacts.](#)

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### **About the Self and Peer Assessments**

Please note that students will be expected to complete the [Self](#) and [Peer Assessments](#), as well as [sign up](#) for 1-on-1 meeting time slots with the instructor, the week before those

meetings actually take place. This will allow us both time to review and prepare so that we may use our meeting time as efficiently as possible.

1-on-1 meetings with the instructor will take place over [Zoom](#), with one 15-minute block per student. These meetings will be held in lieu of a formal class on these days. During the time that students are not in a meeting, they are recommended to make use of the peer mentors' availability via Discord, and to continue working on their projects.

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## **Team Expectations**

Teams are expected to meet weekly outside of class to work, brainstorm, playtest, and collaborate. As part of the [Team Agreement](#) that each team will form in the first week of the semester, an agreed upon meeting time, place, and format that works for each team member should be specified.

Additionally, while individual team members' tasks and deliverables should be clearly defined in the [Project Schedule](#) that each team will form, teams should also have specific goals each week for the development of their project (for example, having a particular feature or game area implemented). Teams should be prepared to discuss these overarching goals in class each week. While these goals should also be reflected in the Project Schedule, it is reasonable to expect that they will be fluid and subject to change as development progresses. Any changes to the team's goals, or to the timeline for their completion, should be reflected in the schedule as well and communicated to each team member.

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## **TCNJ Policies**

Browse all TCNJ Policies here: <https://policies.tcnj.edu/policies/digest.php/?docId=9136>

### **Attendance**

Every student is expected to participate in each of his/her courses through regular attendance at lecture and laboratory sessions. It is further expected that every student will be present, on time, and prepared to participate when scheduled class sessions begin. At the first class meeting of a semester, instructors are expected to distribute in writing the attendance policies which apply to their courses. While attendance itself is not used as a criterion for academic evaluations, grading is frequently based on participation in class discussion, laboratory work, performance, studio practice, field experience, or other activities which may take place during class sessions. If these areas

for evaluation make class attendance essential, the student may be penalized for failure to perform satisfactorily in the required activities. Students who must miss classes due to participation in a field trip, athletic event, or other official college function should arrange with their instructors for such class absences well in advance. The Office of Academic Affairs will verify, upon request, the dates of and participation in such college functions. In every instance, however, the student has the responsibility to initiate arrangements for make-up work.

Students are expected to attend class and complete assignments as scheduled, to avoid outside conflicts (if possible), and to enroll only in those classes that they can expect to attend on a regular basis. Absences from class are handled between students and instructors. The instructor may require documentation to substantiate the reason for the absence. The instructor should provide make-up opportunities for student absences caused by illness, injury, death in the family, observance of religious holidays, and similarly compelling personal reasons including physical disabilities. For lengthy absences, make-up opportunities might not be feasible and are at the discretion of the instructor. The Office of Academic Affairs will notify the faculty of the dates of religious holidays on which large numbers of students are likely to be absent and are, therefore, unsuitable for the scheduling of examinations. Students have the responsibility of notifying the instructors in advance of expected absences. In cases of absence for a week or more, students are to notify their instructors immediately. If they are unable to do so they may contact the Office of Records and Registration. The Office of Records and Registration will notify the instructor of the student's absence. The notification is not an excuse but simply a service provided by the Office of Records and Registration. Notifications cannot be acted upon if received after an absence. In every instance the student has the responsibility to initiate arrangements for make-up work. View this policy online: <https://policies.tcnj.edu/?p=77> (PDF)

### **Academic Integrity**

Academic dishonesty is any attempt by the student to gain academic advantage through dishonest means, to submit, as his or her own, work which has not been done by him/her or to give improper aid to another student in the completion of an assignment. Such dishonesty would include, but is not limited to: submitting as his/her own a project, paper, report, test, or speech copied from, partially copied, or paraphrased from the work of another (whether the source is printed, under copyright, or in manuscript form). Credit must be given for words quoted or paraphrased. The rules apply to any academic



dishonesty, whether the work is graded or ungraded, group or individual, written or oral. View this policy online: <https://policies.tcnj.edu/?p=130> (PDF)

### **[Americans with Disabilities Act \(ADA\)](#)**

Any student who has a documented disability and is in need of academic accommodations should notify the professor of this course and contact the Office of Differing Abilities Services (609-771-2571). Accommodations are individualized and in accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1992. View this policy online: <https://policies.tcnj.edu/?p=145> (PDF)

### **[Final Examinations](#)** (PDF)

### **[Learning Assistants](#)** (PDF)

### **Accessibility and Accommodations**

Students who experience barriers in this course are encouraged to contact the instructor as early in the semester as possible. The Accessibility Resource Center (ARC) is available to facilitate the removal of barriers and to ensure reasonable accommodations. For more information about ARC, please visit: <https://arc.tcnj.edu/>.

### **Access to IT support**

If you have technology issues or needs during the semester, please contact the IT Helpdesk at 609-771-2660 or [helpdesk@tcnj.edu](mailto:helpdesk@tcnj.edu).

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### **Resources for Students**

Dean of Students Office

(609) 771-2780

<http://tcnjcares.tcnj.edu/>

Brower Student Center 220

CAPS: Alcohol and Other Drug Support Services

(609) 771-2571

<https://adep.tcnj.edu/>

Forcina Hall 308

CAPS: Anti-Violence Initiatives (AVI)

(609) 771-2571

<http://oavi.tcnj.edu/>

Forcina Hall 308

CAPS: Mental Health Services (MHS)

(609) 771-2247

<http://caps.tcnj.edu/>

Eickhoff Hall 107

Student Health Services (SHS)

(609) 771-2889

<http://health.tcnj.edu/>

Eickhoff Hall 107